Title (en)

MOTOR DRIVE SYSTEM, MOTOR DRIVE SYSTEM CONTROL METHOD AND TRAVELLING DEVICE

Title (de)

MOTORANTRIEBSSYSTEM, MOTORANTRIEBSSEUERVERFAHREN UND FAHRTVORRICHTUNG

Title (fr)

SYSTÈME D'ENTRAÎNEMENT DE MOTEUR, PROCÉDÉ DE CONTRÔLE DU SYSTÈME D'ENTRAÎNEMENT DE MOTEUR, ET DISPOSITIF MOBILE

Publication

EP 2530830 A1 20121205 (EN)

Application

EP 10843822 A 20100125

Priority

JP 2010000401 W 20100125

Abstract (en)

To make it possible to avoid an unstable state with a simple configuration even one of the phases of the motor fails A motor drive system in accordance with the present invention includes a motor to which a plurality of phase coils of five phases or more are connected in a star connection, an inverter connected to one end of each of the phase coils, the inverter being configured to convert a DC power into an AC power and supply the AC power to each phase of the motor, a power relay disposed at another end of each of the phase coils, the power relay being configured so as to be able to cut off a supply power to at least one phase coil among the plurality of phase coils of the motor by using a plurality of contact points interposed between the star-connected coils, and a control unit that generates a control signal for the inverter and thereby controls driving of the motor. When one or more phase of the motor fails, the control unit opens a contact point of the power relay corresponding to the failed phase and drives three or more phases that are disposed at roughly equal phase-intervals among a plurality of remaining phases.

IPC 8 full level

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DOCDB simple family (publication)

US 2011298404 A1 20111208; **US 8575885 B2 20131105**; CN 102687389 A 20120919; CN 102687389 B 20150429; EP 2530830 A1 20121205; JP 5459311 B2 20140402; JP WO2011089656 A1 20130520; WO 2011089656 A1 20110728

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